CONNECT TO NEXT STEP

Take your next step to connect to us. Email us if you have an interesting story to share related to career.

facebook.com/thedailystar.nextstep

Email: nextstep@thedailystar.net

The Daily Star

DHAKA, FRIDAY, JULY 14, 2017

ASHAR 30, 1424 BS

e-mail: nextstep@thedailystar.net

CAREER | ENTREPRENEURSHIP | SKILL IMPROVEMENT

NEXT STEP

THE DATA DRIVEN FUTURE IS HERE

The startup revolution is in full swing in Bangladesh. The amazing young minds of this country are venturing into all sorts of sectors. One of the promising startups we have seen come out of Grameenphone Accelerator's is Cramstack, a data company with its very own business intelligence and analytics platform. To find out more about what they do, we spoke to the CEO and co-founder of Cramstack,

The Cramstack team

What's the story behind Cramstack? How did it start?

I worked at a well-known company before starting Cramstack. When I was working there, I saw that the maintenance of data in this country was questionable. People either work with excel or manually input the data. Many companies store their massive chain of data on paper. When executives take any business decisions, they put heaps of files in the table. This did not seem very efficient or really data-driven so I wanted to make a platform that helps making quicker and more effective data-driven decisions. I left my job and started working with two of my friends to create a Business Intelligence (BI) tool, and that's how Cramstack began!

What's a Business Intelligence tool?

BI tools essentially derive information from data. Since, enterprise data come in huge volumes, BI tools are used to get proper and timely insights from the data.

We did some research and found out that there are some issues with BI tools as well. Using a BI tool requires multiple layers of interactions. For business executives to get information out of enterprise data, they need to go through IT people to place a request. The IT guys can take multiple days to comply with the requests and still deliver irrelevant information.

Using a regular BI tool also requires technical programming language knowledge. So we thought, why not create a natural language interface for getting data instantly for all sorts of users?

What makes Cramstack different from other data companies?

The difference between Cramstack and any other BI company is that our platform can be used by anyone. It's like Google for enterprise data. There's a search bar and you can search for your data in plain language and get instant queries. We are using an artificial intelligence-driven natural language search bar for data mining. We eliminate all the layers that usual BI tools require. That includes extra personnel, time, and effort.

You can get an upper hand against your competitors by making precise and quicker decisions than others. With Cramstack, executives can do exactly that.

What's the data situation in Bangladesh?

Bangladesh is slowly heading towards automation. Once automation is fully complete, they can make the best out of data-driven decisions. There are a few companies that have digitalised themselves already. We are working with these companies to help them make better business decisions.

The culture in our country is to make executive decisions based on intuition and experience, which is obviously not going to change overnight. We are allowing the companies access to our platform and try it out. They evaluate its use and appeal and then can come on board as our clients.

We know BI has immense potential in the business process and can be a groundbreaking solution for handling data. We are allowing our clients enough time for their businesses to adapt to this new data-driven culture and offering them the opportunity to be the first ones to adopt it.

Who do you figure are your competitors?

Right now, we are mainly targeting the South Asian region. Our main competitors are Power BI by Microsoft and ThoughtSpot. These platforms are focusing on the Western regions. That's why we are working in South East Asia, mainly the market in Singapore. In a sense, all data companies are our competitors.

Currently, we provide a data analytics platform; a data collection platform, so companies can have processed data from the root level; and a data preparation service, turning the unstructured data into structured data. We also have a data science team working on predictive analytics and deep data insights.

What are your future plans?

Our main goal is to be a 360-degree data company. We want to automate data processing and analytics with natural human interaction. We are working to build a data-driven culture in Bangladesh, and in South East Asia, we want to provide a fully automated data processing system in the next five years.

INTERVIEWED BY: SHAHRIAR RAHMAN

Engineer-turned-writer, Shahriar Rahman is Sub-Editor of the tech publication of The Daily Star. *He also leads Kutumbita, a social impact startup.*

THE BOSSMAN

by E. Raza Ronny

DATA SCIENCE

HOTTEST JOB OF THE CENTURY

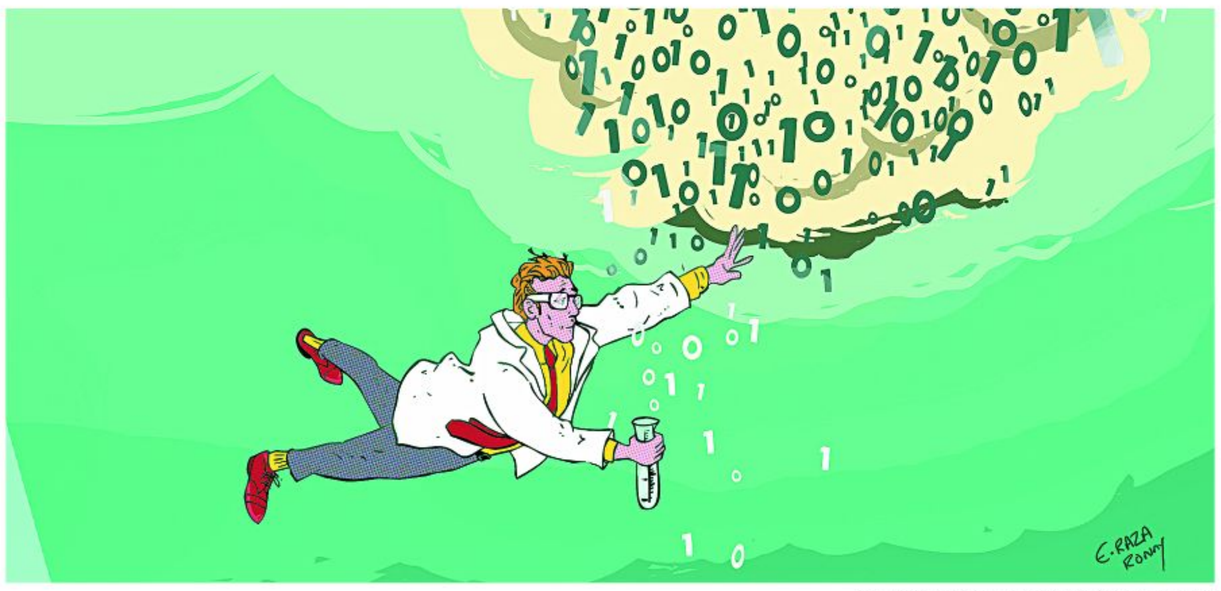

ILLUSTRATION: **EHSANUR RAZA RONNY**

With the rise of ubiquitous computing devices and new age disruptive technologies, big data has become an indispensable part of business. Businesses are producing more data every day and looking deep and hard into it to derive actionable insights. The challenge, however, is collecting, segregating, analysing, and deriving actionable business intelligence and insights from a mire of structured and unstructured data. That is where data scientists come in.

Data scientists are professionals with a strong technical background in computer programming, mathematics, statistics, and in some cases, social science. This range of skills are utilised to work on, clean, organise, and find meaningful insights in large chunks of data, and ultimately, implement them in business.

Uses of data science

Data scientists solve some of the hardest problems that businesses face and they are relevant to almost all realms of business. They look at the root of the problem, or in many cases, opportunities, and come up with strategic and scientific approaches to deal with them. They add value in pretty much every business sector, be it marketing, banking, retail, or manufacturing.

The most obvious use of data science one can imagine is forecasting product demand and optimising the inventory supply chain. On the other hand, a data analyst working with risk can identify fraudulent activity and come up with solutions to prevent it in the finance and banking sector. The use of data and the business intelligence and analytics associated with it is so diverse that there are success stories ranging from airlines to restaurant business.

Other data jobs

Data scientists may be the jack of all trades in the field, but there are other opportunities as well.

Data architects develop underlying architecture to analyse and process data in the way the organisation needs it. A data architect creates the blueprint of a data science project by integrating, centralising, protecting, and maintaining the source of data from a wide range of data management systems, and technologies.

There are data engineers, the driving force behind the design, construction, implementation, and maintenance of highly scalable data management systems. Data engineers build high-performance algorithms, prototypes, and conceptual models according to the blueprint designed by data architects.

Data analysts are detectives, expected to collect numerical information and present the result in a meaningful way—usually in the form of graphs, charts, reports or dashboards. Identifying trends and creating predictive models are among the key responsibilities that a data analyst is expected to take care of.

These data-related responsibilities are exciting new jobs worldwide. The wave of big data has even hit our country. We can see various business intelligence, analytics, and other data and research startups companies coming up in our backyard.

Demand for data scientists

As data is as good as gold, and the world is witnessing an incredible demand for data science professionals. No wonder it's one of the hottest jobs in the States with a mean salary of over USD 90,000 per year at entry levels!

As the big data scene starts to explode, companies are worried about the shortage of skilled professionals and their fear is real. A research by McKinsey has reported, "By 2018, the United States will experience a shortage of 190,000 skilled data scientists, and 1.5 million managers and analysts capable of reaping actionable insights from the big data deluge."

It's not just the US; the whole world feels the need for data professionals. There simply aren't a lot of people with their combination of scientific background, and computational and analytical skills. Companies in Bangladesh will be hunting for data scientists in the days to come, so if you think you've got what it takes, this an exciting, new field waiting to be explored.

TAREK MUSANNA

Making a DIFFERENCE

Bangladesh is rapidly moving towards middle income status by 2021. Our businesses definitely offer immense opportunities for the growing economy and this diversity needs a stage for the stories untold. See Bangladesh make its mark on the global map as Making a Difference brings you our proudest success stories from across the country.

WANT TO PICK UP DATA SCIENCE? BRUSH UP ON YOUR MATH FIRST

William Chen, a data scientist at Quora, the question-and-answer platform, said, "For any aspiring data scientist, I would highly recommend learning statistics with a heavy focus on coding up examples, preferably in Python or R." So if you're considering picking up data science online, but are feeling a little shaky with your stat skills, here are a couple of introductory courses to get you started.

It's easy to get lost looking for a course to start with online. There are thousands of courses, and tens of open courseware websites. So we composed a minimalist list of introductory statistics courses that you can take with little to no previous knowledge. The courses are on-demand every few months and are substantial in content. They're interactive so you don't need any books or read-only tutorials, and get teach through coding up examples, i.e. R or Python. Let's dig in.

1. Foundations of data analysis on edX

This two-part series (Part 1 covers Statistics using R and Part 2 teaches Inferential Statistics) is one of the top reviewed statistics courses available, with a weighted average rating of 4.48 out of 5 stars. This is one of the few courses with high ratings that teaches statistics with a focus on coding up examples. It also covers a lot of probability content, and is a great mix of fundamentals for the beginner data scientist.

Price: Free

Estimated duration: 6 weeks at 3-6 hours per week for each course

2. Introduction to probability—The science of uncertainty on edX

With a rating of 4.91 out of 5 stars, if you want to dive deeper into the world of probability, this is the course for you. Don't let its name fool you, this course is a challenge and much longer than most online courses. While the level at which the e-course covers probability is not necessary a beginner data scientist, the contents are essentially the same as the corresponding courses taught in MIT over the past 50 years, and teach probabilistic models, inference methods, random processes, and more. Added bonus: The teachers are both professors in the Department of Electrical Engineering and Computer Science at MIT!

Price: Free

Estimated duration: 18 weeks at 12 hours per week

3. I "heart" stats: Learning to love statistics on edX

With no coding involved, University of Notre Dame's intro to stat course targets a non-technical audience, making it good for anybody. The course design and instructors are fun, using entertaining examples related to real-life situations we all encounter in everyday life. The professors quip, "If you can add, subtract, multiply, and divide (or just be able to use a calculator to do that!), you will be more than able to handle what will happen as this relationship develops."

By the end of the course, students are promised to be able to identify the most important features of a data set, select statistical tests, think like a detective, and understand the relationship between different variables.

Price: Free

Estimated duration: 9 weeks at 4-6 hours per week

AMIYA HALDER

The writer is In-charge of the career publication of The Daily Star.